

Message from the General Chairs

Relatively new computing paradigms and emerging applications have appeared, such as Cloud or Grid, that introduce a considerable level of execution uncertainty. These lead to open systems that make intensive use of distribution through heterogeneous and non-reliable networks. As a result, tremendous challenges to achieve temporal predictability appear that require integrated approaches to enhance the traditional focus of real-time research that has worked under the assumptions of highly predictable platforms (e.g., operating systems, networks, and closed systems).

Both, from the real-time community and from the distributed and parallel systems one, researchers are, at some point, walking the same path by sharing the same goal of effectively and efficiently providing time deterministic execution frameworks to the next-generation of high-performance, parallel, and distributed applications. Solutions from both domains present interesting approaches that can benefit from meeting at a common forum with the goal of drawing a comprehensive picture of the problem, of the solutions from both worlds, and of the possibility of identifying novel research areas and integrated approaches as resulting from this cross breeding.

The germ of the first edition of REACTION workshop has been the idea of providing a forum for presenting novel contributions to merge real-time with the new computing paradigms and emerging applications that are intensive in the use of distribution. We have aimed at bringing together researchers from the real-time and the distributed systems communities to cross fertilize and provide fresh, novel, and (why not!) risky approaches that may open the road to new efficient solutions.

In this edition, we have taken an exploratory approach aiming at attracting the presentation and discussion of ideas of researchers working on real-time systems and distributed systems for the next-generation applications. Contributions on both practical and theoretical aspects applied to the integration of real-time support in the new computation paradigms and emerging applications emphasizing aspects of real-time support for flexibility and system dynamics have been obtained.

The General Chairs of REACTION would like to thank all authors and contributors. They have shown that there is a real interest for the idea that we had in mind since the beginning. Also, we would like to thank the members of the Programme Committee for their support and help in making this event a reality. Last but not least, we want to thank the RTSS Organizing Committee with special mention to the Workshop Chair for the 24 hours support in all logistic and administrative matters. We hope this event to be just the first of a series of successful REACTION events.

The REACTION 2012 General Chairs

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